

SEMI E170.1-0520

SPECIFICATION FOR SECS-II PROTOCOL FOR SECURED FOUNDATION OF RECIPE MANAGEMENT SYSTEM

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1 Purpose

1.1 The purpose of this Standard is to provide a mapping of the transaction and data of SEMI E170, Specification for Secured Foundation Of Recipe Management System, to SECS-II message protocol.

2 Scope

2.1 The scope of this Standard is to map the transaction and data of SEMI E170 to SECS-II streams, functions, and items.

NOTICE: SEMI Standards and Safety Guidelines do not purport to address all safety issues associated with their use. It is the responsibility of the users of the Documents to establish appropriate safety and health practices, and determine the applicability of regulatory or other limitations prior to use.

3 Referenced Standards and Documents

3.1 *SEMI Standards and Safety Guidelines*

SEMI E5 — Specification for SEMI Equipment Communications Standard 2 Message Content (SECS-II)

SEMI E30 — Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM)

SEMI E39 — Specification for Object Services: Concepts, Behavior, and Services

SEMI E39.1 — Specification for SECS-II Protocol for Object Services Standard (OSS)

SEMI E40 — Specification for Processing Management

SEMI E170 — Specification for Secured Foundation Of Recipe Management System (SFORMS)

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

4 Terminology

4.1 None.

5 Mapping of SROOBJ Services

Table 1 SROOBJ Service Messages Mapping

<i>SROOBJ Service Message Name</i>	<i>Stream, Function</i>	<i>SECS-II Name</i>
GetSROAttributes	S14F1, F2	GetAttr Request/GetAttr Data
SetSROAttributes	S20F1, F2	SetSROAttributes Request/Acknowledge
GetOperationIDList	S20F3, F4	GetOperationIDList Request/Acknowledge
OpenConnection	S20F5, F6	OpenConnectionEvent Send/Acknowledge
CloseConnection	S20F7, F8	CloseConnectionEvent Send/Acknowledge
ClearOperation	S20F9, F10	ClearOperation Request/Acknowledge
GetRecipeXIDList	S20F11, F12	GetRecipeXIDList Request/Acknowledge
DeleteRecipe	S20F13, F14	DeleteRecipe Request/Acknowledge

<i>SROOBJ Service Message Name</i>	<i>Stream, Function</i>	<i>SECS-II Name</i>
WriteRecipe	S20F15, F16	WriteRecipe Request/Acknowledge
ReadRecipe	S20F17, F18	ReadRecipe Request/Acknowledge
VerifyRecipe	S20F35, F36	Verify Recipe Request/Acknowledge
VerifyRecipe Event	S20F37, F38	Verify Recipe Event Send/ Acknowledge
QueryRecipeXIDList	S20F19, F20	QueryRecipeXIDEvent Send/Acknowledge
QueryRecipe	S20F21, F22	QueryRecipeEvent Send/Acknowledge
PostRecipe	S20F23, F24	PostRecipeEvent Send/Acknowledge

6 Mapping of SROOBJ Service Parameter

Table 2 SROOBJ Service Parameter to SECS-II Data Items Mapping

<i>SROOBJ Service Parameter</i>	<i>Range</i>	<i>SECS-II Data Item</i>
ObjID	[20] 1–80 characters	OBJID
ObjType	[20]	OBJTYPE 'SROObject'
OpeType	[51] Enumerated: 0=COP, 1=EOP, 2=FOP, 3=ROP, 4=POP	OPETYPE
RMSUserID	[20] 0–64 characters	RMSUSERID
EQUserID	[20] 0–64 characters	EQUUSERID
AutoPost	[51] Enumerated: 0=ON, 1=OFF	AUTOPOST
AutoClear	[51] Enumerated: 0=ON, 1=OFF	AUTOCLEAR
RetainRecipe	[51] Enumerated: 0=ON, 1=OFF	RETAINRECIPE
AutoClose	[52] 0=AutoClose function is not used, 1 and more = Maximum time in seconds	AUTOCLOSE
RMSPassword	[20] 0–64 characters	RMSPWD
TimeStamp	[20] 16 characters	TIMESTAMP YYYYMMDDhhmmsscc
OpertationID	[20] 0–16 characters	OPEID
AssignorID	[51] Enumerated: 0=RMSASN, 1=EQUASN	ASSGNID
CopyID	[51] Enumerated: 0=MCOPY, 1=RCOPY, 2=NCOPY, 3=CCOPY	COPYID
RevisionID	[20] 0–256 characters	REVID
RecipeID	[20]	RecID, defined in SEMI E40 (i.e., RCPSPEC or PPID)
VersionID	[20] 0–256 characters	VERID

<i>SROOBJ Service Parameter</i>	<i>Range</i>	<i>SECS-II Data Item</i>
TypeID	[51] Enumerated: 0=NotUsed, 1=ProcessLink, 2=ProcessMain, 3=ProcessUnit, 4=Activity, 5=RecipeJob, 6–63 = Reserved for this Standard, 64 and after = Open for users	TYPEID
EquipmentID	[20] 0–256 characters	EQID
RecipeXID	[0] Structure	L,9 1. <TIMESTAMP> 2. <OPEID> 3. <ASSGNID> 4. <COPYID> 5. <REVID> 6. <RecID> 7. <VERID> 8. <TYPEID> 9. <EQID>
RecipeBody	User defined	RCPBODYA
OperationIDList	[0] Structure	L,n 1. <OPEID ₁ > : n. <OPEID _n >
RecipeXIDList	[0] Structure	L, n 1. L,9 1. <TIMESTAMP ₁ > 2. <OPEID ₁ > 3. <ASSGNID ₁ > 4. <COPYID ₁ > 5. <REVID ₁ > 6. <RecID ₁ > 7. <VERID ₁ > 8. <TYPEID ₁ > 9. <EQID ₁ > : n. L,9 1. <TIMESTAMP _n > 2. <OPEID _n > 3. <ASSGNID _n > 4. <COPYID _n > 5. <REVID _n > 6. <RecID _n > 7. <VERID _n > 8. <TYPEID _n > 9. <EQID _n >